

MDA1 Set:

The MDA1 Set contains output from the **NSSL Mesocyclone Detection Algorithm** including:

- Mesocyclone base height
- Mesocyclone depth
- Low-Altitude rotational velocity
- Maximum rotational velocity
- Height of maximum rotational velocity

MDA2 Set:

The MDA2 Set of trends gives additional output from the **NSSL Mesocyclone Detection Algorithm**, including:

- Mesocyclone base height
- Low-Altitude rotational velocity
- Mesocyclone strength index
- Probability of tornado (percentage)
- Probability of severe weather (percentage)

TORN Set:

The TORN Set of trends displays output from **NSSL Tornado Detection Algorithm**:

- TVS Base Height (TVS = Tornadic Vortex Signature)
- TVS Depth - a vertical measurement
- Low-Altitude Velocity Difference
- Maximum Velocity Difference
- Height of Maximum Velocity Difference

TIME-HEIGHT TRENDS (<middle-mouse>)

Time-Height trends allow you to obtain a vertical profile of numerous mesocyclone and cell attributes over time. To obtain a time-height trend, in Trends mode, click on the NSSL mesocyclone or NSSL SCIT algorithm icon with the <middle-mouse> button and the time-height trend window appears. (Figure 3.14) Note that the values plotted on the time vs. height plot are color coded according to rank/strength. These colors correspond to the parameter column in the [NSSL mesocyclone algorithm output table](#) and [NSSL Cell algorithm output table](#).

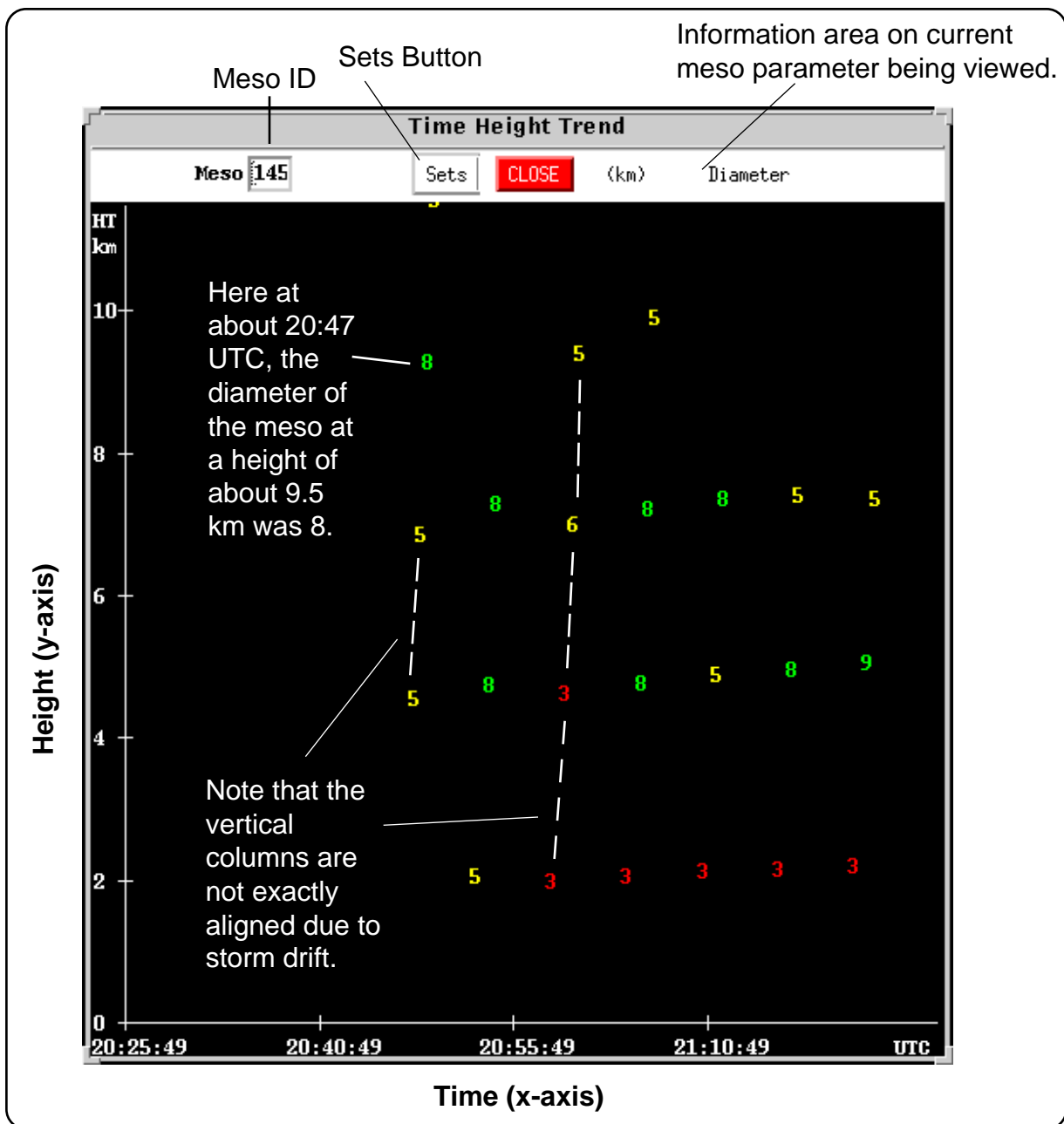


Figure 3.14: Example Time-Height Trend

Time-Height Trend Sets, Continued:

There are five different types of cell values:

- Maximum Reflectivity
- Relativity Core
- Convergence
- Divergence
- Conv/Div Profile

There are five different types of time-height mesocyclone parameter values from the NSSL Mesocyclone Detection Algorithm that are viewable:

Dia- Diameter of the mesocyclone

Rot v - Rotational velocity

Shear - Shear values of the mesocyclone

GTG dV - Gate-to-gate change in velocity

Rank - Strength rank (See more about [NSSL MDA](#))

To access these parameters, click once on the **Sets** menu button with the <left-mouse> button and release. Or, click on the **Sets** menu button and do not release; pull down to your choice and then release the mouse button.

MORE ON TRENDS MODE

Multiple trend windows for different storms, different parameters, and different trend types ([individual](#), [sets](#), or [time-height](#)) can be displayed at the same time. Use the **CLOSE** buttons on each trend window to exit your trend windows. Trends will also update, if windows remain open, and if the same feature is detected again, when the volume scan is updated or changed.

To exit the **Trends** mode, click on another mode (**Raw Data**, **X-Sect**, or **Zoom**).